

Product datasheet for TL502358V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Tyro3 Mouse shRNA Lentiviral Particle (Locus ID 22174)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Tyro3 Mouse shRNA Lentiviral Particle (Locus ID 22174)

Locus ID: 22174

Synonyms: Al323366; Brt; Dtk; Etk-2; etk2/tyro3; Rse; Sky; Tif; tk19-1; TK19-2

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Tyro3 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: <u>BC066058, BC082325, NM 001290800, NM 019392, NM 019392.1, NM 019392.2,</u>

NM 001290800.1

UniProt ID: P55144

Summary: Receptor tyrosine kinase that transduces signals from the extracellular matrix into the

cytoplasm by binding to several ligands including TULP1 or GAS6. Regulates many

physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of TYRO3 on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with PIK3R1 and thereby enhances PI3-kinase activity. Activates the AKT survival pathway, including nuclear translocation of NF-kappa-B and up-regulation of transcription of NF-kappa-B-regulated genes. TYRO3 signaling plays a role in various processes such as neuron protection from excitotoxic injury, platelet aggregation and cytoskeleton reorganization. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces

Function]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.

production of suppressors of cytokine signaling SOCS1 and SOCS3.[UniProtKB/Swiss-Prot







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).